

REMARKS

Examiner Interview

Applicant thanks the Examiner for the courtesy of the telephone interview on April 9, 2007 in which the Examiner confirmed that the Office Action mailed January 19, 2007 was a non-final action.

Rejections

Rejections under 35 U.S.C. § 103

Claims 1-16, 18, and 19

Claims 1-16, 18, and 19 stand rejected under 35 U.S.C. § 103(a) as being obvious over Acharya, U.S. Patent No. 6,108,453 (previously cited), Kamei et al., U.S. Patent 5,528,698 (previously cited), and Ratakonda, U.S. Patent No. 6,307,569. Ratakonda qualifies as prior art only under 35 U.S.C. § 102(e) because it issued after Applicant's filing date. Applicant does not admit that Ratakonda is prior art and reserves the right to swear behind the reference at a later date. Nonetheless, Applicant respectfully submits that the combination of Acharya, Kamei and Ratakonda does not teach or suggest each and every limitation of Applicant's invention as claimed in claims 1-16, 18, and 19.

Acharya discloses enhancing a raw image by combining an enhanced map of the image with an approximated version of the image. The enhanced map is generated by applying noise reduction to the difference between the raw and approximated images. The approximate image is formed from the raw image. The resulting enhanced image that is the pixel-by-pixel sum of intensity values of the enhanced map and approximated image.

Kamei discloses processing a grayscale image by applying intensity mapping functions to the raw grayscale image to obtain image edge information. The image mapping function consists of performing histogram equalization on the raw image. An image edge operator characterizes the image edges using the edge information.

Ratakonda discloses enlarging digital images using a projection onto convex sets method. Ratakonda further discloses that while a bi-linear interpolation scheme is

suitable for the chroma components of an image, it is not suitable for the luminance (i.e., brightness) component (Ratakonda, Col. 6, lines 4-13).

In independent claims 1, 6, 11, and 16, Applicant claims approximating a brightness map from a bi-linear interpolation of the raw image. The Examiner admits that neither Acharya nor Kamei teach or suggest approximating a brightness map from a bi-linear interpolation of the raw image and relies on Ratakonda to disclose this. However, the section of Ratakonda cited by the Examiner in support of his rejection actually teaches away from using bi-linear interpolation for brightness, because Ratakonda teaches that a bi-linear interpolation is not suitable for the brightness component of an image. Therefore, Ratakonda cannot teach or suggest approximating a brightness map from a bi-linear interpolation of the raw image as claimed.

Accordingly, the combination of Acharya, Kamei, and Ratakonda cannot render obvious Applicant's claims 1, 6, 11, and 16 and claims 2-5, 7-10, 12-16, 18, and 19 that depend from them. Accordingly, Applicant respectfully requests the withdrawal of the rejection of the claims under 35 U.S.C. § 103(a) over the combination.

Claims 17 and 20

Claims 17 and 20 stand rejected under 35 U.S.C. § 103(a) as being obvious over Acharya, Kamei, Ratakonda, and Lathrop et. al. US Patent No. 6,288,743 (previously cited). Applicant respectfully submits that the combination of Acharya and Lathrop does not teach or suggest each and every limitation of Applicant's invention as claimed in claims 17 and 20.

Lathrop discloses an electronic still camera that processes raw captured images into finished files. The raw captured image is initially processed by a demosaicing step to generate a full color image (referred to in Lathrop as a "color filter array interpolation"). The image is subsequently subjected to edge enhancements before being stored in the camera's nonvolatile memory.

Claims 17 and 20 depend from independent claim 16. In independent claim 16, Applicant claims approximating a brightness map from a bi-linear interpolation of the raw image. As per above, none of Acharya, Kamei, or Ratakonda teach or suggest this claim limitation. Furthermore, Lathrop is directed towards demosaicing a raw image to

produce a full color image, and does not teach or suggest approximating a brightness map from a bi-linear interpolation of the raw image as claimed. Therefore, the combination cannot render obvious Applicant's invention as claimed in claim 16 and claims 17 and 20 that depend on them. Accordingly, Applicant respectfully requests the withdrawal of the rejection of the claims under 35 U.S.C. § 103(a) over the combination.

SUMMARY

Claims 1-20 are currently pending. In view of the foregoing amendments and remarks, Applicant respectfully submits that the pending claims are in condition for allowance. Applicant respectfully requests reconsideration of the application and allowance of the pending claims.

If the Examiner determines the prompt allowance of these claims could be facilitated by a telephone conference, the Examiner is invited to contact Eric Replogle at (408) 720-8300 x7514.

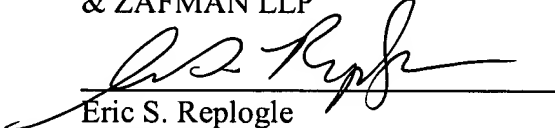
Deposit Account Authorization

Authorization is hereby given to charge our Deposit Account No. 02-2666 for any charges that may be due. Furthermore, if an extension is required, then Applicant hereby requests such extension.

Respectfully submitted,

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